



Development of volatile compounds during storage of different skin care products at various conditions

Horn, A. F.; Thomsen, Birgitte Raagaard; Hyldig, Grethe; Elliot, R.; Jacobsen, Charlotte

Publication date:
2014

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):

Horn, A. F., Thomsen, B. R., Hyldig, G., Elliot, R., & Jacobsen, C. (2014). *Development of volatile compounds during storage of different skin care products at various conditions*. Abstract from 105th AOCS Annual Meeting, San Antonio, TX, United States.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Abstract for AOCS 2014

Title: Development of volatile compounds during storage of different skin care products at various conditions

Authors: Horn, A.F., Thomsen, B.R., Hyldig G., Elliot, R. & Jacobsen, C.

Many skin care products contain various lipids to care and soften the skin. These lipids are either saturated or unsaturated. In the case of even small amounts of unsaturated lipids, these are at risk of oxidizing when exposed to heat, light or other conditions with a pro-oxidative effect. When stored in the homes of consumers skin care products may be exposed to relatively high temperatures and light. Hence, especially skin care products sold in countries with a warm climate can undergo lipid oxidation and develop volatile compounds with off-odours.

This presentation will include results from a storage experiment on three cleansing milks stored between 14 and 84 days, under different conditions. The samples were exposed to heat (20°C, 40°C and 50°C), light (samples at 20°C) and iron (samples at 40°C). Samples were analysed for their development of volatile compounds by dynamic headspace gas chromatography-mass spectrometry and peroxide value, and compared to samples stored at 2°C in the dark. In addition, sensory analyses were carried out to assess the off-odours developed in the samples.